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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,532	02/10/2004	Anna-Mari Vimpari	061602-5500	1088

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EXAMINER	
JUNTIMA, NITTAYA	
ART UNIT	PAPER NUMBER
2416	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,532	VIMPARI ET AL.	
	Examiner	Art Unit	
	NITTAYA JUNTIMA	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 18-20* is/are rejected.

7)☒ Claim(s) *16 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 October 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on 10/16/2008.

2. The objections to the drawings, specification, and claims are withdrawn in view of applicant's amendment.

3. Claims 1-20 are pending.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) 1-14 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process. In this case, the method claim 1 including steps of setting and using is broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1, 2, 5-15, and 18-20** are rejected under 35 U.S.C. 102(e) as being anticipated by Toskala (US 2004/0100918 A1)

The applied reference has common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding **claims 1, 15, and 20**, Toskala teaches a method, performed by node B which is a base station (paragraphs 0024 and 0030), for providing a predetermined transmission rate for an auxiliary information (control information, paragraph 0030) in a predetermined channel (a transport channel carrying control information) of a data transmission stream (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8), said method comprising:

Setting for said data transmission stream (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8, paragraph 0069), an additional combination of selectable transport formats (TFC for defining that there is *always* room for DTX, paragraph 0030), which determines a maximum allowable data rate (total data, including data in a transport

channel plus *n* DTX indication bits allocated for the transport channel for carrying control information, transmitted per unit of time) higher by a predetermined rate amount (some *n* DTX indication bits within the at least N DTX indication bits in the TFC must be allocated for a transport channel, paragraph 0031) than the maximum data rate of a signal (data without DTX bits transmitted per unit of time) transmitted via said predetermined channel (a transport channel carrying control information), into a predetermined set of selectable combinations of selectable transport formats (since paragraph 0031 teaches that the TFC for defining that there is always room for DTX is used, and paragraphs 0047 and 0050 indicates that a third generation WCDMA network is utilized having WCDMA frame structure as described in the 3GPP specifications, therefore, this TFC must be set in a TFCS as defined by the 3GPP specifications. See also Figs. 2-7 which show how DTX indication bits are allocated for a transport channel).

Using said predetermined rate amount of said predetermined channel to transmit said auxiliary information (node B sends control information to the UE by replacing the DTX indication bits with the control information, paragraph 0030).

Regarding **claim 2**, Toskala teaches that said transmission stream is a multiplex signal having at least one channel (the multiplex signal contains multiple transport channels, paragraph 0069), and said selectable transport formats can be allocated to said at least one channel (transport formation combination contains one transport format for each transport channel, paragraph 0050).

Regarding **claim 5,** Toskala teaches adding to said data transmission stream (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8) a new channel, and allocating to said new channel a set of selectable transport formats comprising a transport format which determines said maximum allowable data rate (Fig. 6 shows a third transport channel between TrCH A and B being configured as dummy transport channel for fixed positions and Fig. 7 shows a dummy transport channel TrCH C for flexible positions, therefore a set of selectable transport formats having a transport format for defining the maximum allowable data rate must be included, paragraphs 0059 and 0063).

Regarding **claims 6 and 19**, because paragraphs 0047 and 0050 indicate that a third generation WCDMA network is utilized having WCDMA frame structure as described in the 3GPP specifications, therefore, it is inherent that a restriction for using only a subset of selectable transport format combinations for the data transmission stream (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8, i.e., CCTrCH) must be included as described in the 3GPP specifications.

Regarding **claims 7 and 8**, Toskala teaches that the predetermined channel is located at a predetermined fixed position which corresponds to the last channel position within a frame of said data transmission stream (paragraph 0026 discloses that "If the dummy transport channel is provided at fixed positions, any transport channel can be used the dummy transport channel," therefore, the last transport channel of a multiplex signal, i.e., CCTrCH, constitutes the last channel position within a frame of said data transmission stream).

Regarding **claim 9**, it is inherent that the TFC which defines that there is always room for DTX must define the maximum allowable data rate that defines transport blocks of a predetermined size in the data transmission stream (the multiplex signal, paragraph 0069) since the number of bits is known. See paragraphs 0027 and 0030.

Regarding **claim 10**, Toskala teaches that the auxiliary information comprises a discontinuous transmission information (DTX, paragraphs 0029-0030).

Regarding **claim 11**, Toskala teaches that said channel is a dedicated channel (a transport channel carrying dummy bits replaced with control information is part of a dedicated link, paragraphs 0049 and 0069).

Regarding **claim 12**, Toskala teaches that said data transmission stream is a downlink signal of a cellular network (a downlink of a WCDMA, paragraph 0069).

Regarding **claim 13**, Toskala teaches that said auxiliary information is replaced by a control information (DTX indication bits are replaced by control information, paragraph 0030).

Regarding **claim 14**, Toskala teaches that said control information comprises HSDPA signaling information (paragraph 0034).

Allowable Subject Matter

7. **Claims 16 and 17** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 10/16/2008 have been fully considered but they are not persuasive.

A. In the Remarks, the applicant argues that Toskala fails to teach setting an additional combination of selectable transport formats which determines a higher than maximum allowable data rate into a predetermined set of selectable combinations of selectable transport formats, and using the predetermined rate amount to transmit auxiliary information because even though Toskala teaches that TFC is defined "such that there is always room for DTX," Toskala never teaches how to provide "enough" DTX dummy bits.

In response, the Examiner respectfully disagrees. Examiner submits that Toskala teaches the claimed limitations of (i) setting for **said data transmission stream** (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8, paragraph 0069), **an additional combination of selectable transport formats** (TFC for defining that there is *always* room for DTX, paragraph 0030), which determines **a maximum allowable data rate** (total data, i.e., data in a transport channel plus *n* DTX indication bits allocated for the transport channel for carrying control information, transmitted per unit of time) higher by **a predetermined rate**

amount (some *n* DTX indication bits within the at least N DTX indication bits in the TFC must be allocated for a transport channel, paragraph 0031) than **the maximum data rate of a signal** (data without DTX bits transmitted per unit of time) transmitted via **said predetermined channel** (a transport channel carrying control information), into **a predetermined set of selectable combinations of selectable transport formats** (since paragraph 0031 teaches that the TFC for defining that there is always room for DTX is used, and paragraphs 0047 and 0050 indicates that a third generation WCDMA network is utilized having WCDMA frame structure as described in the 3GPP specifications, therefore, **this TFC must be set in a TFCS as defined by the 3GPP specifications;** see also Figs. 2-7 which show how DTX indication bits are allocated for a transport channel), and (ii) using said predetermined rate amount of said predetermined channel to transmit said auxiliary information (node B sends control information to the UE by replacing the DTX indication bits with the control information, paragraph 0030).

Note that whether "enough" DTX dummy bits are provided is irrelevant because it is not recited in the claim. And although recited in the preamble and should not be given patentable weight, Toskala also teaches providing a predetermined transmission rate (*n* DTX indication bits allocated for the transport channel for carrying control information transmitted per unit of time) for an auxiliary information (control information) in a predetermined channel (a transport channel carrying control information) of a data transmission stream (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8). See paragraphs 0030-0031 and 0069.

Therefore, it is respectfully submitted that all claimed limitations are fully met and the rejection is maintained.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NITTAYA JUNTIMA whose telephone number is 571.272.3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571.272.3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nittaya Juntima/
Examiner, Art Unit 2416
1/12/2009

/Brenda Pham/
Primary Examiner, Art Unit 2416